### **REMARKS**

Claims presented for prosecution in this Application are claims 9-23. Claims 9-14, 18, 20, 21 and 22 have been rejected over cited prior art, while claims 15-17, 19 and 23 have been indicated as containing allowable subject matter. In view of Applicants' remarks below, Applicants respectfully submit that claims 9-23 are in condition for allowance. Accordingly, Applicants respectfully request that the present Response be considered and entered, the rejections to the claims be withdrawn, and that the case now be passed to issue.

## The Objection to the Disclosure

The Examiner has objected to the disclosure as referring to canceled claims 1 and 2.

In response, Applicants have amended the Disclosure to address the Examiner's concerns in this regard.

Applicants therefore respectfully request that the outstanding objection to the Disclosure now be withdrawn.

## The Objection to the Claims

The Examiner has objected to claims 10 and 13 on clerical grounds.

In response, Applicants have amended claims 10 and 13 to address the Examiner's concerns in this regard.

Applicants therefore respectfully request that the outstanding objection to the claims now be withdrawn.

# The 35 USC 103(a) Rejection of Claims 9-14, 18, 20, 21 and 22 over Moates in view of Ferrari

The Examiner has rejected claims 9-14, 18, 20, 21 and 22 as being obvious over Moates in view of Ferrari. Applicants respectfully assert that Moates in view of Ferrari does not disclose, at least, each and every aspect of independent claims 9 and 10.

With general respect to claims 9 and 10, Applicants assert that the present invention is directed towards a sensor array which has a higher number of sensors while the number of connecting conductors remains the same (see, inter alia, page 3 of Applicants' specification).

In this regard, Applicants respectfully stress that the present invention is not simply directed to the <u>number</u> of sensor elements in the sensor device, but rather <u>a</u> <u>specific configuration of sensors</u> that do not increase the connecting conductors of the sensor device, the like of which is neither shown nor suggested by any of the cited prior art references, either alone or in combination with one another.

Independent claim 9 explicitly recites, inter alia:

"wherein each of the i sensor elements of the first type is connected between one of said n row conductors and one of said m column conductors and wherein each of the j additional sensor elements of the second type is connected between two of the n row conductors."

Similarly, independent claim 10 explicitly recites, inter alia:

"wherein each of the i sensor elements of the first type is connected between one of said n row conductors and one of said m column conductors and wherein each of the k additional sensor elements of the second type is connected between two of the m column conductors." In stark contrast, neither Moates, nor Ferrari teach or suggest a sensor array having <u>both</u> a first sensor type and a second sensor type, <u>in the specific configuration</u> and <u>orientation explicitly recited in independent claims 9 and 10</u>.

In particular, Applicants agree with the outstanding Office Action that Moates does not teach or suggest the 'second type' of sensor elements connected between two of the *n*-row (or, *m*-column) conductors, as explicitly and respectively recited in claims 9 and 10. Ferrari is utilized by the outstanding rejection to teach these missing sensor elements.

Applicants respectfully submit that Ferrari does not contain any teaching or suggestion of *sensor* elements which are arranged and connected between two column conductors, or between two row conductors. In particular, Applicants respectfully submit that Ferrari's resistors 311 do not function as *sensor* elements, noting that Ferrari itself states that "[w]hile the resistance values, or magnitudes of the resistors 311 are not critical, all resistors 311 should be of generally the same resistance value or magnitude." (emphasis added).

Still further, and *in arrguendo*, Applicants respectfully traverse the combination of references as suggested by the outstanding Office Action as not setting forth a prima facie case for obviousness. The expressed motivations (to combine Moates and Ferrari) in the outstanding Office Action <u>do not rely upon suggestions or teachings in the references themselves</u>. Rather, the expressed motivations for combining these references are because such an "arrangement would *be beneficial* to provide *more sensing elements* to make *more measurements* in order to get a *better resolution* or a *more accurate result*." (emphasis added).

It is Applicants' respectful contention, however, that it is the height of impermissible hindsight to merely select *one configuration* of sensor elements from a *first* sensor array, and combine it with a *different configuration* of sensor elements from a *second* sensor array, merely on the basis that the non-taught combination of these sensor elements somehow 'makes the overall system better', without any such teaching or suggestion in either of the combined references.

Indeed, while such a combination may well result in *more* sensors outputting *more* measurements, the salient point is that <u>none</u> of the cited references <u>teach or</u> <u>themselves suggest</u> such a combination. In this regard, it may be said that it is Applicants' who have uniquely recognized the non-obvious benefits of devising a sensor array in a manner which has not itself been devised or suggested by the cited prior art.

As indicated by MPEP § 2143.01, "[t]he mere fact that references <u>can</u> be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination".

Therefore, Applicants respectfully request that should the Examiner repeat any of the combinations of prior art expressed in the outstanding Office Action, that the Examiner point out where support for such combinations can be found <u>in the art themselves</u>, or take Official Notice of the same, pursuant to MPEP § 2144.03.

Still further, Applicants again note that the recited configuration and orientation of sensor elements recited in claims 9 and 10 are not merely a matter of 'design choice', but stem from a desire to devise a sensor array which has a higher number of sensors while the number of connecting conductors remains the same.

Neither of the cited prior art references discusses having <u>both</u> a first and second set of sensor elements as recited in claims 9 and 10; neither of the cited prior art references teach or suggest the desirability of combining their teachings in the manner proposed in the outstanding Office Action; and neither of the cited prior art references even recognize the problem sought to be solved by the present invention, let alone teach or suggest Applicants' solution to this unrecognized problem, as explicitly recited in independent claims 9 and 10.

As neither Moates nor Ferrari teach or suggest each and every aspect of independent claims 9 and 10, Applicants assert that the outstanding 35 USC 103(a) rejection cannot be maintained and respectfully requests withdrawal of the rejection of claims 9-14, 18, 20, 21 and 22 on this basis alone.

Should a Notice of Allowance not be forthcoming, the Examiner is requested to phone the undersigned for a telephonic interview, an Examiner's amendment, or the like, while the outstanding issues are fresh in the mind of the Examiner.

### **CONCLUSION**

In view of the remarks above, it is respectfully submitted that claims 9-23 are allowable, and an early action to that effect is earnestly solicited.

The Examiner is invited to contact the undersigned at the number below to expedite resolution of any issues that the Examiner may consider to remain unresolved. In particular, should a Notice of Allowance not be forthcoming, the Examiner is requested to phone the undersigned for a telephonic interview, an Examiner's amendment, or the like, while the outstanding issues are fresh in the mind of the Examiner.

Please charge our Deposit Account No. 13-0235 for the fees associated with the accompanying One-Month Extension of Time. It is believed that no additional fees or deficiencies in fees are owed. However, authorization is hereby given to charge our Deposit Account No. 13-0235 in the event any additional fees are owed.

Respectfully submitted,

y *144* 

Nicholas J. Tuccillo Registration No. 44,322

Attorney for Applicants

McCORMICK, PAULDING & HUBER LLP CityPlace II, 185 Asylum Street Hartford, CT 06103-4102

Tel.: (860) 549-5290 Fax.: (413) 736-4543